



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,319	10/16/2003	Jin Wang	LAHA 9-2-11	8497
50525 7590 06/11/2007 DUFT BORNSSEN & FISHMAN, LLP 1526 SPRUCE STREET SUITE 302 BOULDER, CO 80302			EXAMINER DAVENPORT, MON CHERI S	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 06/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/687,319

Applicant(s)

WANG ET AL.

Examiner

Mon Cheri S. Davenport

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) ✓  
Paper No(s)/Mail Date 4/25/2005.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-5, 7-11, and 14-18** rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants admitted prior art in view of Ehram et al. (US Patent Number 7,020,098)

Regarding **claim 1** Applicant's admitted prior art discloses

a signaling network configured to transport call signaling(*see figure 1A, section 133, signaling network*); and

a bearer network configured to transport bearer traffic(*see figure 1A, section 134, bearer network*),

wherein a special connection on the bearer network is established and at least a portion of the capacity of the special connection is reserved for transporting call signaling(*see figure 1A, section 131, plurality of connections*)

However Applicant's admitted prior art fails to disclose a wireless communication network configured to provide low latency services to mobile wireless devices, the wireless communication network comprising: a transport network comprising, a base station system connected to the transport network, the base station system, responsive to receiving call signaling from a mobile wireless device determines if the call signaling is for a low latency service, forwards the call signaling over the special connection on the bearer network if the call signaling is for a low latency service, and forwards the call signaling over the signaling network if the call signaling is not for a low latency service, a switching system section connected to the transport network, the switching system, responsive to receiving the call signaling over the special connection on the bearer network or the signaling network, forwards the call signaling over a packet data network as claimed.

Ehram et al. discloses a wireless communication network configured to provide low latency services to mobile wireless devices, the wireless communication network comprising: a

Art Unit: 2616

transport network comprising (*see figure 3, see col. 3, lines 30-32, wireless communication system which provides push to talk services*):

a base station system (*see figure 4, see col. 7, lines 1-6, mobile station*) connected to the transport network, the base station system, responsive to receiving call signaling from a mobile wireless device determines if the call signaling is for a low latency service(*see col. 3, lines 4-5, the mobile station detect that the user is interacting with real-time media(low latency), see col. 7, lines 61-64, response to PTT session*), forwards the call signaling over the special connection on the bearer network if the call signaling is for a low latency service, and forwards the call signaling over the signaling network if the call signaling is not for a low latency service(*see col. 7-8, lines 61-2, in response to the PTT session, via the proxy server, a SIP INVITE from the conference server inviting the mobile station to make conference communication( low latency ))*; and

a switching system (*see fig. 3, sections 82, and 84, proxy server and communication server*) section connected to the transport network, the switching system, responsive to receiving the call signaling over the special connection on the bearer network or the signaling network, forwards the call signaling over a packet data network(*see col. 7-8, lines 61-2, the proxy server contacts the communication server to send to the IP network(packet data network)*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 2** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 1*). In addition the wireless communication network includes:

the switching system, responsive to receiving call signaling from the packet data network, determines if the call signaling is for a low latency service (*Ehram et al, see col. 3, lines 4-5, the mobile station detect that the user is interacting with real-time media(low latency), see col. 7, lines 61-64, response to PTT session*), forwards the call signaling over the special connection on the bearer network if the call signaling is for a low latency service(*see col. 10, lines 47-49, the mobile station acquire both radio link and data link( special connection)*), and forwards the call signaling over the signaling network if the call signaling is not for a low latency service(*see col. 10, lines 57-60, the mobile station allocates traffic channel to transmits signal data*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Art Unit: 2616

Regarding **Claim 3** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 1*). In addition the wireless communication network includes:

wherein the low latency service comprises a Push to Call service (*Ehram et al see col. 10, lines 7-10, the PTT system*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 4** Ehram et al. discloses everything as applied above (*see claim 1*). In addition the wireless communication network includes:

wherein the special connection also transports bearer traffic in addition to call signaling (*see applicant's admitted prior art, see figure 1A, section 131, plurality of connections*)

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 5** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 4*). In addition the wireless communication network includes:

further comprising: a control system that controls the amount of bearer traffic allowed on the special connection to help ensure latency on the special connection(*Ehram et al see col. 8, lines 50-57, the proxy server , communication server and group data store, comprise the SIP server (service agent), manages all packet data communication involving the mobile stations(amount of traffic allowed)*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **claim 7** Applicant's admitted prior art discloses

establishing a special connection on the bearer network( *see figure 1A, section 131, plurality of connections*)

reserving at least a portion of the capacity on the special connection for transporting call signaling(*see figure 1A, section 131, plurality of connections*)

However Applicant's admitted prior art fails to disclose a method of operating a wireless communication network configured to provide low latency services to mobile wireless devices, the wireless communication network comprising a transport network, a base station system, and a switching system, the transport network comprising a signaling network configured to transport call signaling and a bearer network configured to transport bearer traffic, the method comprising the steps of: in response to receiving call signaling in the base station system from a mobile wireless device, determining if the call signaling received by the base station system is for a low latency service, forwarding the call signaling over the special connection on the bearer network if the call signaling is for a low latency service, forwarding the call signaling over the signaling network if the call signaling is not for a low latency service, in response to receiving the call signaling in the switching system over the special connection or the signaling network, forwarding the call signaling over a packet data network as claimed.

Ehram et al. discloses a method of operating a wireless communication network configured to provide low latency services to mobile wireless devices, the wireless communication network comprising a transport network, a base station system, and a switching system, the transport network comprising a signaling network configured to transport call signaling and a bearer network configured to transport bearer traffic, the method comprising the steps of (*Ehram et al. see figure 3, see col. 3, lines 30-32, wireless communication system which provides push to talk services*):

in response to receiving call signaling in the base station system from a mobile wireless device(*Ehram et al. see col. 7, lines 61-64, response to a user initiating a conference*),

determining if the call signaling received by the base station system is for a low latency service(*Ehram et al. see col. 7, lines 61-64, response to PTT session( low latency)*),

forwarding the call signaling over the special connection on the bearer network if the call signaling is for a low latency service(*Ehram et al. see col. 5, lines 48-52, mobile station engage in packet based media conferencing(call signaling) acquiring both radio link layer and data link layer with the IP network*), and

forwarding the call signaling over the signaling network if the call signaling is not for a low latency service(*Ehram et al. see col. 10, lines 57-60, the mobile station allocates traffic channel to transmit signal data*); and

in response to receiving the call signaling in the switching system over the special connection or the signaling network, forwarding the call signaling over a packet data network(*Ehram et al. see col. 7-8, lines 61-2, the proxy server contacts the communication server to send to the IP network(packet data network)*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al.

Art Unit: 2616

network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 8** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 7*). In addition the method includes:

wherein in response to receiving call signaling from the packet data network into the switching system, the method further comprises the steps of: determining if the call signaling received by the switching system is for a low latency service, forwarding the call signaling over the special connection on the bearer network if the call signaling is for a low latency service, and forwarding the call signaling over the signaling network if the call signaling is not for a low latency service (*Ehram et al. see col. 6, lines 41-44, the mobile station sends a message over the packet data network access channel, request radio-link resources (low latency services), BSC then assigns bearer traffic channel*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 9** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 7*). In addition the method includes:

wherein the low latency service comprises a Push to Call service(*Ehram et al. see col. 10, lines 7-10, the PTT system*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 10** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 7*). In addition the method includes:

transporting bearer traffic over the special connection in addition to call signaling(*see applicant's admitted prior art, see figure 1A, section 131, plurality of connections*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 11** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 10*). In addition the method includes:

controlling the amount of bearer traffic allowed on the special connection to help ensure latency on the special connection(*Ehram et al. see col. 8, lines 50-57, the proxy server, communication server and group data store, comprise the SIP server (service agent), manages all packet data communication involving the mobile stations(amount of traffic allowed)*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **claim 14** Applicant's admitted prior art discloses the wireless communication network comprising a transport network, the transport network comprising a signaling network (*see figure 1A, section 133, signaling network*) configured to transport call signaling and a bearer network configured to transport bearer traffic, establishing a special connection on the bearer network(*see applicant's admitted prior art, see figure 1A, section 131, plurality of connections*), reserving at least a portion of the capacity on the special connection for transporting call signaling(*see applicant's admitted prior art see figure 1A, section 131, plurality of connections*) .

However Applicant's admitted prior art fails to disclose a method of operating a wireless communication network configured to provide low latency services to mobile wireless devices, a base station system, and a switching system, the method comprising the steps of: in response to receiving call signaling in the switching system from a packet data network, determining if the call signaling received by the switching system is for a low latency service, forwarding the call signaling over the special connection on the bearer network if the call signaling is for a low latency service, forwarding the call signaling over the signaling network if the call signaling is not for a low latency service, in response to receiving the call signaling in the base station system over the special connection or the signaling network, forwarding the call signaling to a mobile wireless device as claimed.

Ehram et al. discloses a method of operating a wireless communication network configured to provide low latency services to mobile wireless devices, a base station system, and a switching system, the method comprising the steps of (*see figure 3, see col. 3, lines 30-32, wireless communication system which provides push to talk services*):

in response to receiving call signaling in the switching system from a packet data network( *see col. 6, lines 41-44, the mobile station sends a message over the packet data network access channel, request radio-link resources (low latency services), BSC then assigns bearer traffic channel*),

determining if the call signaling received by the switching system is for a low latency service(*(see col. 3, lines 4-5, the mobile station detect that the user is interacting with real-*



Art Unit: 2616

*time media(low latency), see col. 6, lines 41-44, request radio-link resources (low latency services), BSC then assigns bearer traffic channel),*

forwarding the call signaling over the special connection on the bearer network if the call signaling is for a low latency service(*Ehrsam et al. see col. 6, lines 41-44, request radio-link resources (low latency services), BSC then assigns(forwarding) bearer traffic channel), and*

forwarding the call signaling over the signaling network if the call signaling is not for a low latency service(*Ehrsam et al. see col. 10, lines 57-60, the mobile station allocates traffic channel to transmit signal data); and*

in response to receiving the call signaling in the base station system over the special connection or the signaling network, forwarding the call signaling to a mobile wireless device(*Ehrsam et al. see col. 10, lines 7-9, PTT system, a user interact with targeted user(mobile wireless device, see fig. 3, section 52 and 54 , see col. 9, lines 21-26, set up and tear down of conference sessions RTP media streams).*

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehrsam et al. network because Ehrsam et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehrsam et al., col. 2, lines 63-65).

Regarding **Claim 15** Applicant's admitted prior art in view of Ehrsam et al. discloses everything as applied above (*see claim 14*). In addition the method includes:

wherein in response to receiving call signaling from the mobile wireless device into the base station system, the method further comprises the steps of:

determining if the call signaling received by the base station system is for a low latency service(*Ehrsam et al. see col. 3, lines 4-5, the mobile station detect that the user is interacting with real-time media(low latency), see col. 7, lines 61-64, response to PTT session( low latency)),*

forwarding the call signaling over the special connection on the bearer network if the call signaling is for a low latency service(*Ehrsam et al. see col. 5, lines 48-52, mobile station engage in packet based media conferencing(call signaling) acquiring both radio link layer and data link layer with the IP network), and*

forwarding the call signaling over the signaling network if the call signaling is not for a low latency service(*Ehrsam et al. see col. 10, lines 57-60, the mobile station allocates traffic channel to transmit signal data).*

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehrsam et al. network because Ehrsam et al.'s invention provides a mechanism for reducing the latency that

Art Unit: 2616

occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 16** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 14*). In addition the method includes:

wherein the low latency service comprises a Push to Call service(*Ehram et al. see col. 10, lines 7-10, the PTT system*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 17** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 14*). In addition the method includes:

further comprising the step of: transporting bearer traffic over the special connection in addition to call signaling(*see applicant's admitted prior art see figure 1A, section 131, plurality of connections*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

Regarding **Claim 18** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 17*). In addition the method includes:

further comprising the step of: controlling the amount of bearer traffic allowed on the special connection to help ensure latency on the special connection(*Ehram et al. see col. 8, lines 5-12, the communication ( PTT session) is sent and encoded through media channel signals such as RTP/UDP/IP*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide applicant's admitted prior art system with Ehram et al. network because Ehram et al.'s invention provides a mechanism for reducing the latency that occurs in the initiation of the packet-based real-time media sessions (see Ehram et al., col. 2, lines 63-65).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2616

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6, 12-13, and 19-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Ehram et al. in further view of Cleveland et al. (US Patent Application Publication 2002/0118665).

Regarding **Claim 6, 12-13, and 19-20** Applicant's admitted prior art in view of Ehram et al. discloses everything as applied above (*see claim 1, 7 and 14*).

However Applicant's admitted prior art and Ehram et al. fails to disclose the special connection comprises a T-1 line; and the portion of the capacity of the special connection reserved for transporting call signaling comprises at least a fractional of a DS0; or the special connection comprises a fiber facility; and the portion of the capacity of the special connection reserved for transporting call signaling comprises at least a fractional of the bandwidth of the fiber facility as claimed.

Cleveland et al. disclose the special connection comprises a T-1 line (*see paragraph [0030], lines 1-8, the BTS with the BSC communication link of voice and data signals( special connection) using means of T1 line*); and

the portion of the capacity of the special connection reserved for transporting call signaling comprises at least a fractional of a DS0(*see paragraph [0030], lines 1-8, the BTS with the BSC communication link of voice and data signals( special connection) using means of T1 line, portion of T1 line is fractional of a DS0, part voice part data signals*); and

; or

the special connection comprises a fiber facility( *see paragraph [0030], line 7-8, fiber optic link*); and

the portion of the capacity of the special connection reserved for transporting call signaling comprises at least a fractional of the bandwidth of the fiber facility (*see paragraph [0030], line 1-8, fiber optic link, part voice part data signals*).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Applicant's admitted prior art in view of Ehram et al. wireless network system with T1 fiber line because Cleveland et al. system is used reduce the need for increased power from a MS (see Cleveland et al., see paragraph [0003], lines 2-3).

***Citation of Pertinent Prior Art***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Sayeddi** (US Patent Application Publication 2002/0145990). See abstract.

**Yao et al.** (US patent Number 5,983,099) see abstract.

**Rosen et al.** (US Patent Application Publication 2002/0173326) See abstract and see figure 2.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mon Cheri S. Davenport whose telephone number is 571-270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD/md

June 4, 2007



*Seema S. Rao*  
SEEMA S. RAO  
6/6/07  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600